

RSPA -1999-12624-1

7-13-84

ACE-TECH, Inc.
...Your one stop requal, scrap and maintance shop.

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June 14th, 1999

Office of Hazardous Materials Standards
U.S.D.O.T.
Associate Administrator for Hazardous Materials Safety
400 7th street, S.W.
Washington, DC 20590

RE: Petition for Rulemaking

Dear Administrator,

This correspondence serves as a formal request to the agency to amend regulation 173.34 (18) relative to acetylene cylinder regualification.

Proposed Action:

The undersigned proposes that the agency ammend the date for porous filler requalification from the current requirement of "no sooner than 3 years, and no later then 20 years for cylinders manufactured "On or after January , 1991" with no requirement for "subsequent" requalification, to mirror that currently required by the agency for shell inspection and requalification which is every ten years. The undersigned proposes that porous filler requalification also commence on January 1st, 2001 for all cylinders manufactured before January 1,1991 as is currently required for shell inspeciton and requalification.

The undersigned further proposes that the agency require licensed inspection and requalification facilities to remove the paint on all cylinders prior to shell inspection through any mechanism that safely accomplishes the task.

The purpose of this request is to enhance the safety of the acetylene cylinder during normal usage and to insure that damage to shells and fillers either not recognized during inspection procedures or delayed due the length of the intervals between inspections are addressed and rectified.

Text of Propose Rule:

DOT 8 and 8AL cylinders. (I) Each owner of a DOT 8 or 8AL cylinder used to transport



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acetylene must have the cylinder shell and the porous filler requalified in accordance with CGA Pamphlet C-13. Requalification must also include the removal of paint prior to shell inspection to insure that shell defects are clearly recognized during the inspection process. Requalification must be performed in accordance with the following schedule.

Date of cylinder manufacturer	Shell Inspection	Porous filler requalification
	Initial	Initial
Before January 1, 1991	Before January 1, 2001	Before January 1, 2001
On or after January 1, 1991	10 years	10 years

Subsequent requalification intervals for shell and porous filler are every 10 years.

Petitioner's interest:

Ace-Tech is a USDOT licensed inspection facility (license number DO 82). As an independent requalification facility, Ace-Tech has inspected 49,400 acetylene cylinders from March 31st, 1998 through March 31st, 1999. Ace-Tech has developed inspection records and statistics for all cylinders inspected by serial number, date of manufacturer, manufacturer name, and DOT specification. Ace-Tech statistics have also recorded all cylinder failures due to shell and porous filler defects. Based on the statistics developed by Ace-Tech, we believe that serious safety issues are prevalent throughout the country specific to acetylene cylinders that may pass visual shell inspection without paint removal and with acetylene cylinders whose porous fillers present head clearance and void spaces defects sufficient to create an explosive hazard. An ammendment to the regulations as requested in this petition address these issues and provide a substanaital safety margin for the continued usage of these cylinders.

Ace-Tech is an associate member of the NWSA (National Welding Supply Association).

Petitionars Information and argument:

From March 31st, 1998 through March 31st, 1999 the petitioner conducted shell and porous filler inspections on 49,400 cylinders. During this time frame the petitioner maintained records of all cylinders that passed and failed inspection. Included in our records are the specific reasons for each cylinder failure. These results are described as follows:



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Total number of cylinders inspected:	49,400
Total number of cylnders that failed	5,730
Total number of cylinder failiures by %	11.6%
Total number of cylinder failures / shell	5,187
Total number of cylinder failures / filler	543

Of the cylinders that failed inspection due to shell defects (pitting, corrosion.,dents, digs etc) more then 92% would have passed a visual inspection if Ace-Tech had not removed the paint from the cylinder through shot-blasting and had the ability to inspect bare metal.

Of the 543 cylinders tht failed due to defects in the porous filler such as head clearance and filler integrity, none would have been detected if porous filler insepction was not an integral part of our program.

The failures noted above can be construed as an industry average and provide the agency with a guideline to interperate the number of potential problem cylinders in use throughout industry. If industry estimates are accurate, then more than one million acetylene cylinders are in use in the United States. Just taking the statistics for filler failure alone, then 1.1% of all these cylinders have fillers that would fail if inspected. Every acetylene cylinder that has a porous filler that is unsafe, presents a safety hazard for explosion that must be addressed and rectified. Accelerating the intervals for inspections and will have a significant positive impact on public safety. Likewise, insuring that shell insepction include the removal of paint will require licensed inspections to detect serious shell defects that otherwise go unnoticed.

Regulatory burden on small businesses:

The petitioner is a small business and has direct contact with other small businesses throughout the Midwest. The small business companies effected by this ammendment are currently insuring that their acetylene cylinders are being appropriately inspected as required by current regulation. These businesses understand that their cylinders must have a shell inspection every ten years. The additional burden of having the cylinder valve removed by the inspection facility to evaluate the porous filler is a minor cost and entials on average an additional 5-7 minutes per cylinder for insepction. The cost to business is anticipated to incur an additional 5-10% over the cost of shell inspection alone. This cost will average between \$1.00 and \$1.50 per cylinder which the petitioner believes will not create a burde on small business and is out weighed by the interests of public safety.

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Respectively Submitted For Consideration,



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Photo Index

1. Cylinders prior to being shot-blasted (paint removal)
2. Cylinders after shot blasting. Bare metal allows for an accurate inspection of the cylinder shell.
3. Bondo patch on side wall of cylinder not visual without Shot-blasting.
4. Large bondo patch previously hidden by several layers of paint.
5. Corroded bottom of cylinder previously hidden by paint
Corrosion and industrial weathering.

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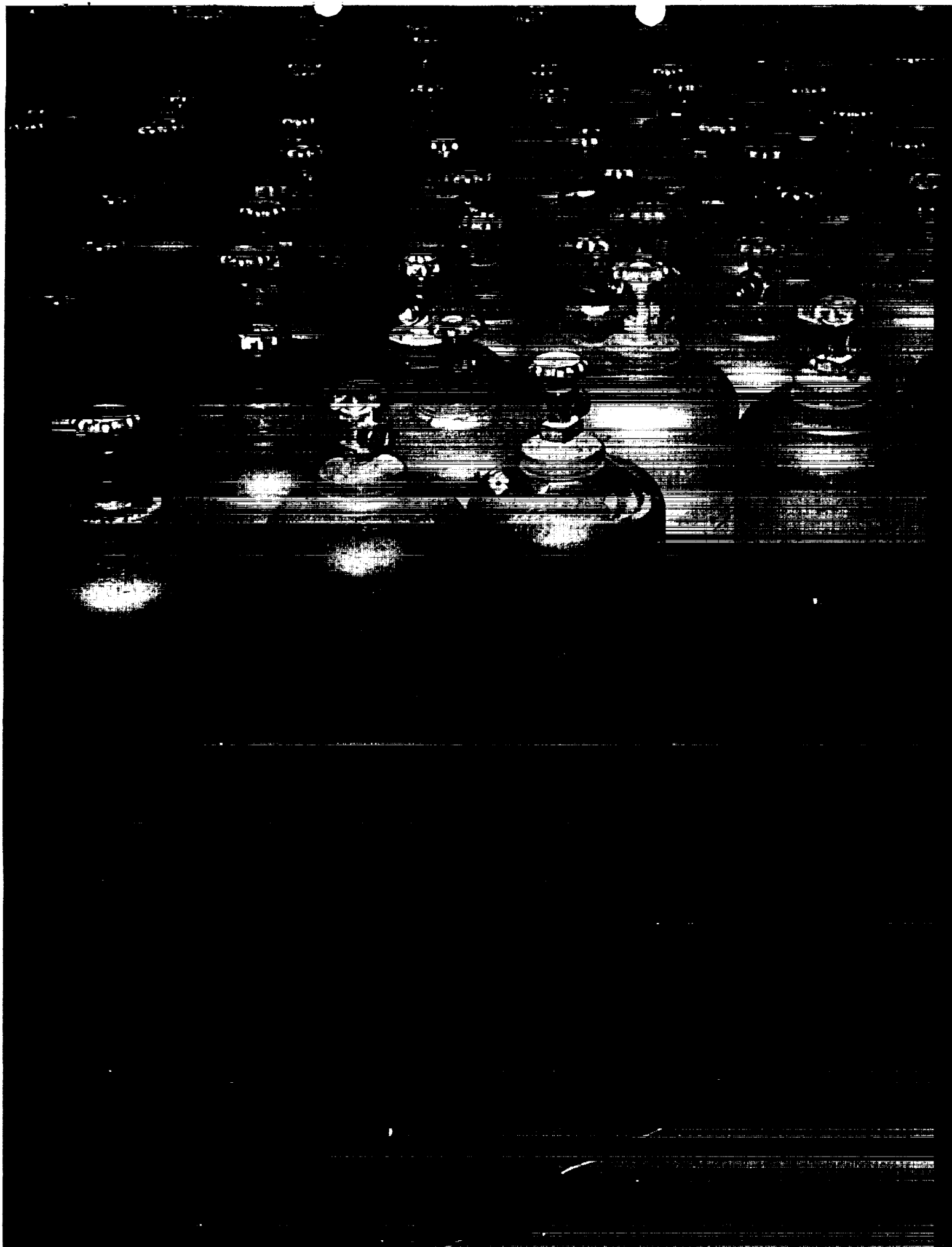
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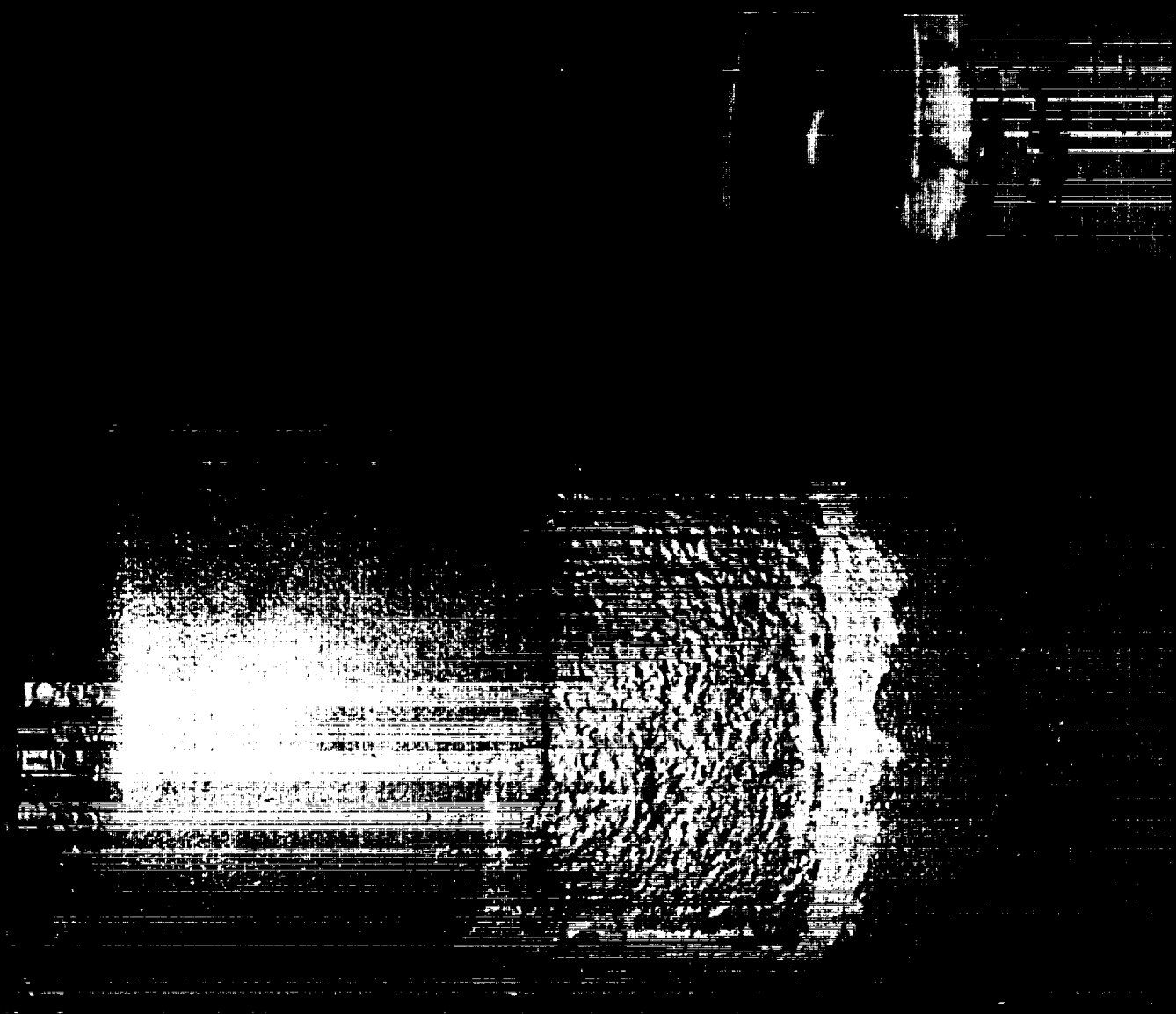
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